



## Effective Health Care

### Treatments for Major Depressive Disorder

#### Results of Topic Selection Process & Next Steps

The nominator, an executive director and behavioral health specialist with the Reasons to Hope Foundation, is interested in using a new systematic review to inform physicians, nurses, therapists, and social workers on how to better understand and adjust approaches to treatment, therapies, and social support services for improved health outcomes of major depressive disorder (MDD). We identified an AHRQ evidence review published in December 2015 covering the scope of the key questions. After reviewing the protocol, the nominator determined that this review addresses their questions on interest. Therefore, a new review would be duplicative of an existing product. No further activity on this topic will be undertaken by the Effective Health Care (EHC) Program.

#### Topic Brief

**Topic Name:** Treatments for Major Depressive Disorder

**Topic #:** 0709

**Nomination Date:** 10/10/2016

**Topic Brief Date:** 02/13/2017

**Authors:**

Kara Winchell

**Conflict of Interest:** None of the investigators have any affiliations or financial involvement that conflicts with the material presented in this report.

**Summary of Key Findings:**

- Appropriateness and importance: The topic is both appropriate and important.
- Duplication: A new review on this topic would be duplicative of an existing product.
  - Our search for duplication identified an AHRQ evidence review published in December 2015 covering pharmacologic and non-pharmacologic approaches to treating MDD.

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# Introduction

Approximately 7.6% of the US population over the age of 12 has suffered from depression.<sup>1</sup> This number is much higher in women and those with a low socioeconomic status. Depression is a serious mental illness, and has been attributed to high rates of other chronic diseases. While major depressive disorder (MDD) is a major problem in the United States, the support that is offered to those with this mental illness are vast. Most primary care providers are equipped to diagnose, treat, and manage MDD. Those with severe MDD can see mental health specialists, including psychologists and psychiatrists. Around 80% of patients seeking and finding treatment for MDD show an improvement in their symptoms within four to six weeks of beginning a treatment regimen, whether is it medication, psychotherapy, social support groups, or a combination.<sup>2</sup> The most important part of overcoming depression is communicating with a trained medical profession so steps can be taken to begin remission.

Topic nomination 0709 was received on October 10, 2016. It was nominated by an executive director and behavioral health specialist with the Reasons to Hope Foundation. After clarifying the terminology used in the nomination with the nominator, the questions for this nomination are:

Key Question 1. What are the benefits and harms of pharmacologic treatments for MDD?

Key Question 1a. Do the benefits and harms vary by subgroup?

Key Question 2. What are the benefits and harms of non-pharmacologic treatments for MDD?

Key Question 2a. Do the benefits and harms vary by subgroup?

To define the inclusion criteria for the key questions we specify the population, interventions, comparators, and outcomes (PICO) of interest. See Table 1.

**Table 1.** Key Questions and PICOs

<b>Key Questions</b>	1. What are the benefits and harms of pharmacologic treatments for MDD? 1a. Do the benefits and harms differ by subgroups?	2. What are the benefits and harms of non-pharmacologic treatments for MDD? 2a. Do the benefits and harms differ by subgroups?
<b>Population</b>	1. Adults with MDD 1a. Adults with MDD, stratified by mental or physical comorbidities, age, sex, and race/ethnicity	2. Adults with MDD 2a. Adults with MDD, stratified by mental or physical comorbidities, age, sex, and race/ethnicity
<b>Interventions</b>	Any FDA-approved pharmacologic treatment for MDD, and off-label therapies	Non-pharmacological therapies, such as psychotherapy, CAM treatments, or exercise
<b>Comparators</b>	Placebo, other pharmacologic intervention	Placebo, other non-pharmacological intervention
<b>Outcomes</b>	Response, remission, speed of response, speed of remission, relapse, quality of life, functional capacity, reduction of suicidality, hospitalization, adverse events	Response, remission, speed of response, speed of remission, relapse, quality of life, functional capacity, reduction of suicidality, hospitalization, adverse events

## Methods

To assess topic nomination 0709, *Treatments for Major Depressive Disorder*, for priority for a systematic review or other AHRQ EHC report, we used a modified process based on established criteria. Our assessment is hierarchical in nature, with the findings of our assessment determining the need for further evaluation. Details related to our assessment are provided in Appendix A.

1. Determine the *appropriateness* of the nominated topic for inclusion in the EHC program.
2. Establish the overall *importance* of a potential topic as representing a health or healthcare issue in the United States.
3. Determine the *desirability of new evidence review* by examining whether a new systematic review or other AHRQ product would be duplicative.
4. Assess the *potential impact* a new systematic review or other AHRQ product.
5. Assess whether the *current state of the evidence* allows for a systematic review or other AHRQ product (feasibility).
6. Determine the *potential value* of a new systematic review or other AHRQ product.

### Appropriateness and Importance

We assessed the nomination for appropriateness and importance (see Appendix A).

### Desirability of New Review/Duplication

We searched for high-quality, completed or in-process evidence reviews pertaining to the key questions of the nomination. Table 2 includes the citations for the reviews that were determined to address the key questions.

### Compilation of Findings

We constructed a table outlining the selection criteria as they pertain to this nomination (see Appendix A).

## Results

### Appropriateness and Importance

This is an appropriate and important topic. According to the CDC, around 8 million primary care visits per year in the US are attributed to MDD, and there are many pharmacologic and non-pharmacological treatments that have shown efficacy.<sup>1</sup>

### Desirability of New Review/Duplication

A new AHRQ evidence review examining pharmacologic and non-pharmacological treatments for MDD would be duplicative of an existing product. In December 2015, AHRQ published a comprehensive evidence review examining treatments (pharmacologic and non-pharmacological) for MDD.<sup>3</sup> See Table 2, *Duplication* column for the systematic review citations that were determined to address the key questions.

**Table 2.** Key questions with the identified corresponding evidence reviews

Key Question	Duplication (Completed or In-Process Evidence Reviews)
KQ 1; 1a: Pharmacologic treatment for MDD; subgroups	Total number of completed or in-progress systematic reviews – 1 • AHRQ – 1 <sup>3</sup>
KQ 2; 2a: Non-pharmacologic treatment for MDD; subgroups	Total number of completed or in-progress systematic reviews - 1 • AHRQ – 1 <sup>3</sup>

*Abbreviations:* AHRQ=Agency for Healthcare Research and Quality; KQ=Key Question; MDD=Major Depressive Disorder

## Summary of Findings

- Appropriateness and importance: The topic is both appropriate and important.
- Duplication: A new review on this topic would be duplicative of an existing product.
  - Our search for duplication identified an AHRQ evidence review published in December 2015 covering pharmacologic and non-pharmacologic approaches to treating MDD.

## References

1. Centers for Disease Control and Prevention. 2016. Depression. National Center for Health Statistics. Available from: <https://www.cdc.gov/nchs/data/databriefs/db172.htm>

2. Depression and Bipolar Support Alliance. 2016. Depression Statistics. Available from: [http://www.dbsalliance.org/site/PageServer?pagename=education\\_statistics\\_depression](http://www.dbsalliance.org/site/PageServer?pagename=education_statistics_depression)

3. Gartlehner G, Gaynes BN, Amick HR, Asher G, Morgan LC, Coker-Schwimmer E, Forneris C, Boland E, Lux LJ, Gaylord S, Bann C. 2015. Nonpharmacological Versus Pharmacological Treatments for Adult Patients with Major Depressive Disorder. Agency for Healthcare Research and Quality. Available from: <https://www.effectivehealthcare.ahrq.gov/search-for-guides-reviews-and-reports/?pageaction=displayproduct&productID=2155>

## **Appendices**

### **Appendix A: Selection Criteria Summary**

## Appendix A. Selection Criteria Summary (

Selection Criteria	Supporting Data
<b>1. Appropriateness</b>	
1a. Does the nomination represent a health care drug, intervention, device, technology, or health care system/setting available (or soon to be available) in the U.S.?	Yes, this topic represents a health care drug and intervention available in the U.S.
1b. Is the nomination a request for a systematic review?	Yes, this topic is a request for a systematic review.
1c. Is the focus on effectiveness or comparative effectiveness?	The focus of this review is on both effectiveness and comparative effectiveness.
1d. Is the nomination focus supported by a logic model or biologic plausibility? Is it consistent or coherent with what is known about the topic?	Yes, it is biologically plausible. Yes, it is consistent with what is known about the topic.
<b>2. Importance</b>	
2a. Represents a significant disease burden; large proportion of the population	Yes, this topic represents a significant burden. According to the CDC, around 8 million primary care visits per year in the US are attributed to MDD. <sup>1</sup>
2b. Is of high public interest; affects health care decision making, outcomes, or costs for a large proportion of the US population or for a vulnerable population	Yes, this topic affects health care decisions for a large, vulnerable population.
2c. Represents important uncertainty for decision makers	Yes, this topic represents important uncertainty for decision makers.
2d. Incorporates issues around both clinical benefits and potential clinical	Yes, this nomination addresses both benefits and potential harms of pharmacological intervention and non-pharmacological treatments for MDD.
2e. Represents high costs due to common use, high unit costs, or high associated costs to consumers, to patients, to health care systems, or to payers	Yes this mental health diagnosis represents high cost due to the high rate of health and interpersonal dysfunction.
<b>3. Desirability of a New Evidence Review/Duplication</b>	
3. Would not be redundant (i.e., the proposed topic is not already covered by available or soon-to-be available high-quality systematic review by AHRQ or others)	An AHRQ evidence review on this topic would be duplicative. In December 2015, AHRQ published a comprehensive review examining treatments (pharmacologic and non-pharmacological) for MDD. <sup>3</sup>

*Abbreviations:* AHRQ=Agency for Healthcare Research and Quality; CDC=Centers for Disease Control and Prevention; MDD=Major Depressive Disorder